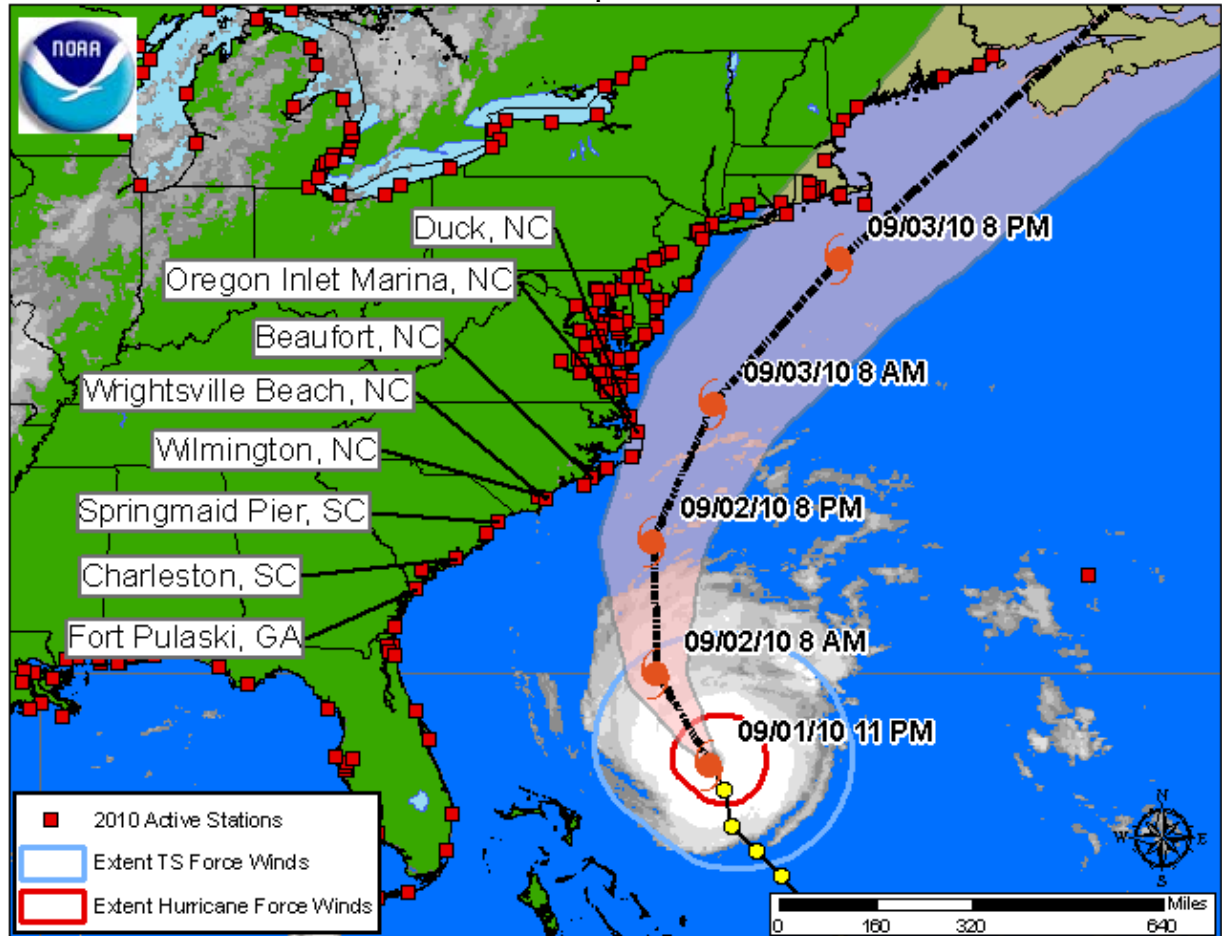




Hurricane EARL QuickLook
Posted: 00:00 EDT 09/02/2010

NOAA and NOAA Partnership Stations Relative to the Storm



Storm Analysis

As of 09/02/2010 00:00 EDT, water levels along the eastern U.S. Coastline from Georgia to South Carolina are rising and range between 0.3 to 0.8 feet above predicted levels. Water levels in North Carolina are at or near predicted levels. Winds are increasing in Georgia and southern North Carolina and range from 15 to 20 knots, with gusts up to 25 knots. Barometric pressure is falling across the region.

Water Level and Meteorological plots available below are updated automatically. Water level predictions relative to Mean Lower Low Water are:

Fort Pulaski, GA: Next predicted high tides are 6.20 ft (1.89 m) at 09/02/2010 02:26 EDT and 7.43 ft (2.26 m) at 09/02/2010 15:03 EDT.

Charleston, SC: Next predicted high tides are 4.70 ft (1.43 m) at 09/02/2010 02:04 EDT and 5.75 ft (1.75 m) at 09/02/2010 14:48 EDT.

Springmaid Pier, SC: Next predicted high tides are 4.42 ft (1.35 m) at 09/02/2010 01:53 EDT and 5.49 ft (1.67 m) at 09/02/2010 14:23 EDT.

Wrightsville Beach, NC: Next predicted high tides are 3.41 ft (1.04 m) at 09/02/2010 01:36 EDT and 4.36 ft (1.33 m) at 09/02/2010 14:12 EDT.

Wilmington, NC: Next predicted high tides are 3.90 ft (1.19 m) at 09/02/2010 03:35 EDT and 4.49 ft (1.37 m) at 09/02/2010 16:11 EDT.

Beaufort, NC: Next predicted high tides are 2.78 ft (0.85 m) at 09/02/2010 02:03 EDT and 3.47 ft (1.06 m) at 09/02/2010 14:51 EDT.

Oregon Inlet Marina, NC: Next predicted high tides are 1.06 ft (0.32 m) at 09/02/2010 02:05 EDT and 1.29 ft (0.39 m) at 09/02/2010 14:52 EDT.

Duck, NC: Next predicted high tides are 2.77 ft (0.85 m) at 09/02/2010 01:38 EDT and 3.70 ft (1.13 m) at 09/02/2010 14:18 EDT.

For additional data, please see the [Center for Operational Oceanographic Products & Services](#) website. For more information or archived products and reports, please see the [Storm_QuickLook](#) homepage.

Analyst:CMF

SELECT NATIONAL HURRICANE CENTER ADVISORY INFORMATION:

HURRICANE EARL ADVISORY NUMBER 31

1100 PM EDT WED SEP 01 2010

...EARL A LITTLE STRONGER...THREATENING THE U.S. MID-ATLANTIC COAST...

WATCHES AND WARNINGS

SUMMARY OF WATCHES AND WARNINGS IN EFFECT...

A HURRICANE WARNING IS IN EFFECT FOR...

*** BOGUE INLET NORTH CAROLINA NORTHEASTWARD TO THE NORTH CAROLINA/VIRGINIA BORDER INCLUDING THE PAMLICO AND ALBEMARLE SOUNDS.**

A HURRICANE WATCH IS IN EFFECT FOR...

*** NORTH OF THE NORTH CAROLINA/VIRGINIA BORDER TO CAPE HENLOPEN DELAWARE.
* WOODS HOLE TO SAGAMORE BEACH MASSACHUSETTS...INCLUDING MARTHAS VINEYARD AND NANTUCKET.**

A TROPICAL STORM WARNING IS IN EFFECT FOR...

- * CAPE FEAR TO WEST OF BOGUE INLET NORTH CAROLINA.**
- * NORTH OF THE NORTH CAROLINA/VIRGINIA BORDER TO SANDY HOOK NEW JERSEY...INCLUDING DELAWARE BAY SOUTH OF SLAUGHTER BEACH AND THE CHESAPEAKE BAY SOUTH OF NEW POINT COMFORT.**

A TROPICAL STORM WATCH IS IN EFFECT FOR...

- * SANDY HOOK NEW JERSEY TO WOODS HOLE MASSACHUSETTS...INCLUDING BLOCK ISLAND AND LONG ISLAND SOUND.**
- * NORTH OF SAGAMORE BEACH TO THE MOUTH OF THE MERRIMACK RIVER MASSACHUSETTS.**

A HURRICANE WARNING MEANS THAT HURRICANE CONDITIONS ARE EXPECTED SOMEWHERE WITHIN THE WARNING AREA. A WARNING IS TYPICALLY ISSUED 36 HOURS BEFORE THE ANTICIPATED FIRST OCCURRENCE OF TROPICAL-STORM-FORCE WINDS CONDITIONS THAT MAKE OUTSIDE PREPARATIONS DIFFICULT OR DANGEROUS. PREPARATIONS TO PROTECT LIFE AND PROPERTY SHOULD BE RUSHED TO COMPLETION.

A HURRICANE WATCH MEANS THAT HURRICANE CONDITIONS ARE POSSIBLE WITHIN THE WATCH AREA. A WATCH IS TYPICALLY ISSUED 48 HOURS BEFORE THE ANTICIPATED FIRST OCCURRENCE OF TROPICAL-STORM-FORCE WINDS CONDITIONS THAT MAKE OUTSIDE PREPARATIONS DIFFICULT OR DANGEROUS.

A TROPICAL STORM WARNING MEANS THAT TROPICAL STORM CONDITIONS ARE EXPECTED SOMEWHERE WITHIN THE WARNING AREA WITHIN 36 HOURS.

A TROPICAL STORM WATCH MEANS THAT TROPICAL STORM CONDITIONS ARE POSSIBLE WITHIN THE WATCH AREA GENERALLY WITHIN 48 HOURS.

INTERESTS IN NORTHERN NEW ENGLAND AND SOUTHEASTERN CANADA SHOULD MONITOR THE PROGRESS OF EARL.

FOR STORM INFORMATION SPECIFIC TO YOUR AREA...INCLUDING POSSIBLE INLAND WATCHES AND WARNINGS...PLEASE MONITOR PRODUCTS ISSUED BY YOUR LOCAL NATIONAL WEATHER SERVICE FORECAST OFFICE.

DISCUSSION AND 48-HOUR OUTLOOK

AT 1100 PM EDT THE CENTER OF HURRICANE EARL WAS LOCATED ABOUT 520 MI SE OF CAPE HATTERAS NORTH CAROLINA. EARL IS MOVING TOWARD THE NORTH-NORTHWEST NEAR 18 MPH. THIS MOTION IS EXPECTED TO CONTINUE TONIGHT WITH A TURN TO THE NORTH ON THURSDAY. ON THE FORECAST TRACK THE CORE OF THE HURRICANE WILL APPROACH THE NORTH CAROLINA COAST BY LATE THURSDAY AND MOVE NEAR OR OVER THE OUTER BANKS OF NORTH CAROLINA THURSDAY NIGHT. THE CENTER IS EXPECTED TO PASS NEAR OR OFFSHORE OF THE DELMARVA PENINSULA ON FRIDAY.

MAXIMUM SUSTAINED WINDS HAVE INCREASED TO NEAR 140 MPH WITH HIGHER GUSTS. EARL IS A CATEGORY FOUR HURRICANE ON THE SAFFIR-SIMPSON HURRICANE

WIND SCALE. SOME FLUCTUATIONS IN INTENSITY ARE LIKELY TONIGHT AND THURSDAY BUT A GRADUAL WEAKENING TREND IS ANTICIPATED THEREAFTER.

EARL IS A LARGE HURRICANE. HURRICANE FORCE WINDS EXTEND OUTWARD UP TO 90 MILES FROM THE CENTER AND TROPICAL STORM FORCE WINDS EXTEND OUTWARD UP TO 230 MILES.

THE MINIMUM CENTRAL PRESSURE ESTIMATED FROM NOAA HURRICANE HUNTER AIRCRAFT OBSERVATIONS IS 932 MB.

HAZARDS AFFECTING LAND

WINDS...TROPICAL STORM FORCE WINDS ARE EXPECTED TO REACH THE NORTH CAROLINA COAST WITHIN THE WARNING AREA BY THURSDAY AFTERNOON WITH HURRICANE FORCE WINDS OCCURRING BY LATE THURSDAY. TROPICAL STORM FORCE WINDS WILL LIKELY REACH THE COAST FROM VIRGINIA NORTHWARD TO NEW JERSEY BY LATE THURSDAY NIGHT OR EARLY FRIDAY.

STORM SURGE...A DANGEROUS STORM SURGE WILL RAISE WATER LEVELS BY AS MUCH AS 3 TO 5 FEET ABOVE GROUND LEVEL WITHIN THE HURRICANE WARNING AREA AND THE LOWER CHESAPEAKE BAY. ELSEWHERE WITHIN THE TROPICAL STORM WARNING AREA STORM SURGE WILL RAISE WATER LEVELS BY AS MUCH AS 1 TO 3 FEET ABOVE GROUND LEVEL. NEAR THE COAST THE SURGE WILL BE ACCOMPANIED BY LARGE AND DESTRUCTIVE WAVES.

RAINFALL...ACCUMULATIONS OF 2 TO 4 INCHES WITH ISOLATED MAXIMUM AMOUNTS OF 6 INCHES ARE EXPECTED OVER PORTIONS OF EASTERN NORTH CAROLINA INCLUDING THE OUTER BANKS. ACCUMULATIONS OF 1 TO 2 INCHES ARE POSSIBLE FARTHER TO THE NORTH ALONG THE IMMEDIATE MID-ATLANTIC COAST.

SURF...LARGE SWELLS FROM EARL WILL CONTINUE TO AFFECT THE BAHAMAS AND THE EAST COAST OF THE UNITED STATES THROUGH FRIDAY. THESE SWELLS WILL LIKELY CAUSE DANGEROUS SURF CONDITIONS AND RIP CURRENTS.

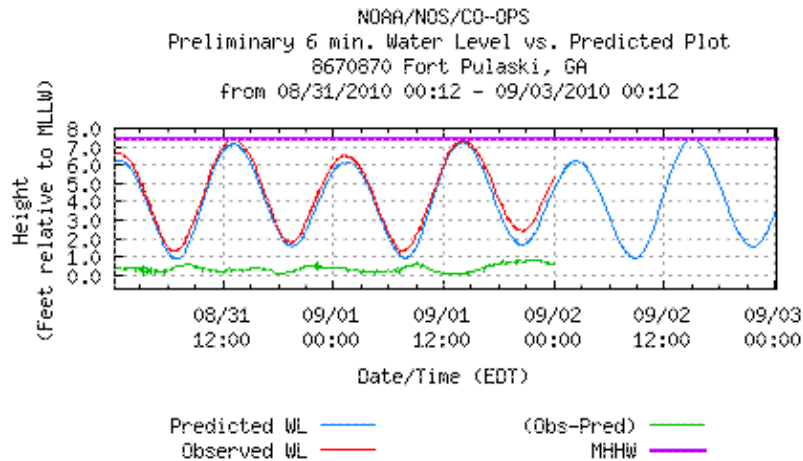
FORECASTER PASCH

For the purpose of timely release, data contained within this QuickLook have undergone a "limited" NOS Quality Assurance/Control; however, the data have not yet undergone final verification. All data subject to NOS verification.

Jump to: [Fort Pulaski - Water Level](#), [Fort Pulaski - Winds](#), [Fort Pulaski - Barometric](#), [Fort Pulaski - Air/Water Temp](#), [Charleston - Water Level](#), [Charleston - Winds](#), [Charleston - Barometric](#), [Springmaid Pier - Water Level](#), [Springmaid Pier - Winds](#), [Springmaid Pier - Barometric](#), [Wrightsville Beach - Water Level](#), [Wrightsville Beach - Winds](#), [Wrightsville Beach - Barometric](#), [Wrightsville Beach - Air/Water Temp](#), [Wilmington - Water Level](#), [Wilmington - Barometric](#), [Wilmington - Air/Water Temp](#), [Beaufort - Water Level](#), [Beaufort - Winds](#), [Beaufort - Barometric](#), [Beaufort - Air/Water](#)

Temp, Oregon Inlet Marina - Water Level, Oregon Inlet Marina - Winds, Oregon Inlet Marina - Barometric, Oregon Inlet Marina - Air/Water Temp, Duck - Water Level, Duck - Winds, Duck - Barometric, Duck - Air/Water Temp,

Fort Pulaski, GA - [Return to List](#)

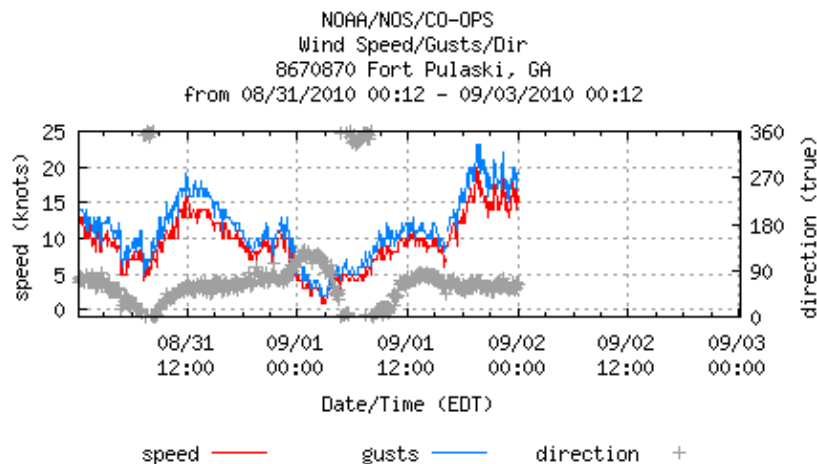


Last Observed Sample: 09/02/2010 00:00 (EDT)

Relative to **MLLW**: **Observed: 5.33 ft. Predicted: 4.71 ft. Residual: 0.62 ft.**

Historical Maximum Water Level: Oct 15 1947, 3.4 ft. above **MHHW**

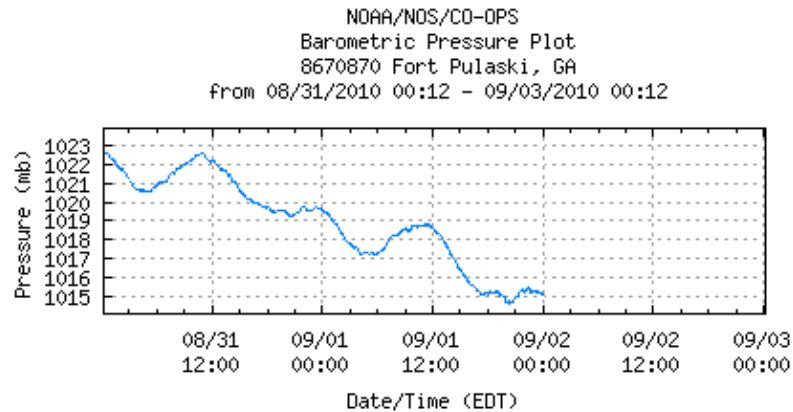
Fort Pulaski, GA - [Return to List](#)



Last Observed Sample: 09/02/2010 00:00 (EDT)

Wind Speed: 15 knots Gusts: 19 knots Direction: 062° T

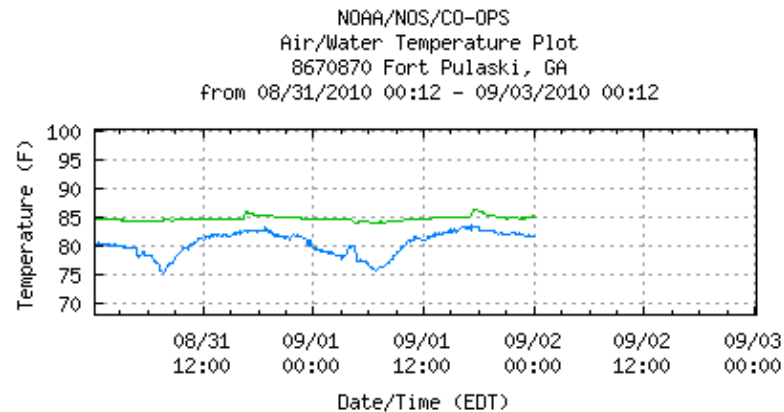
Fort Pulaski, GA - [Return to List](#)



Last Observed Sample: 09/02/2010 00:00 (EDT)

Barometric Pressure: 1015.1 mb

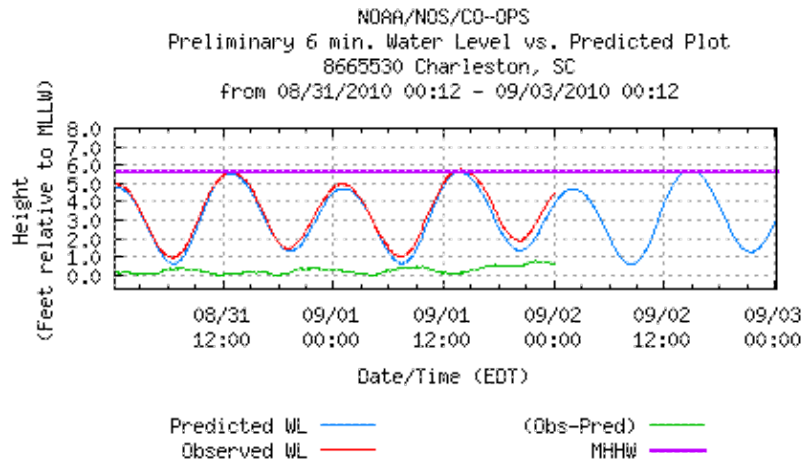
Fort Pulaski, GA - [Return to List](#)



Last Observed Sample: 09/02/2010 00:00 (EDT)

Water Temperature: 85.1° F Air Temperature: 81.7° F

Charleston, SC - [Return to List](#)

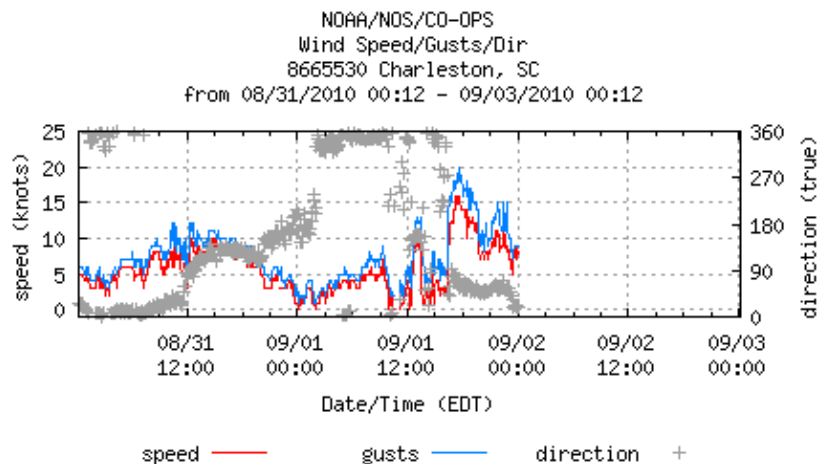


Last Observed Sample: 09/02/2010 00:00 (EDT)

Relative to **MLLW**: **Observed: 4.50 ft. Predicted: 3.86 ft. Residual: 0.64 ft.**

Historical Maximum Water Level: Sep 21 1989, 6.76 ft. above **MHHW**

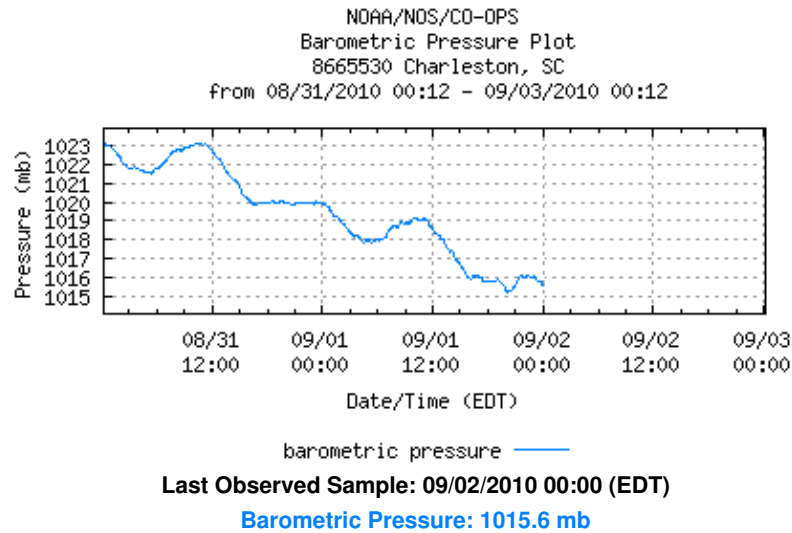
Charleston, SC - [Return to List](#)



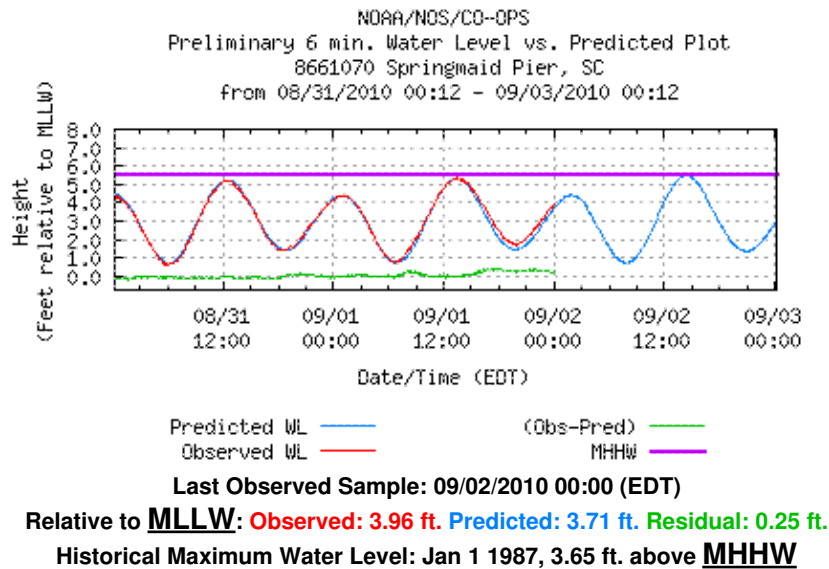
Last Observed Sample: 09/02/2010 00:00 (EDT)

Wind Speed: 8 knots Gusts: 9 knots Direction: 018° T

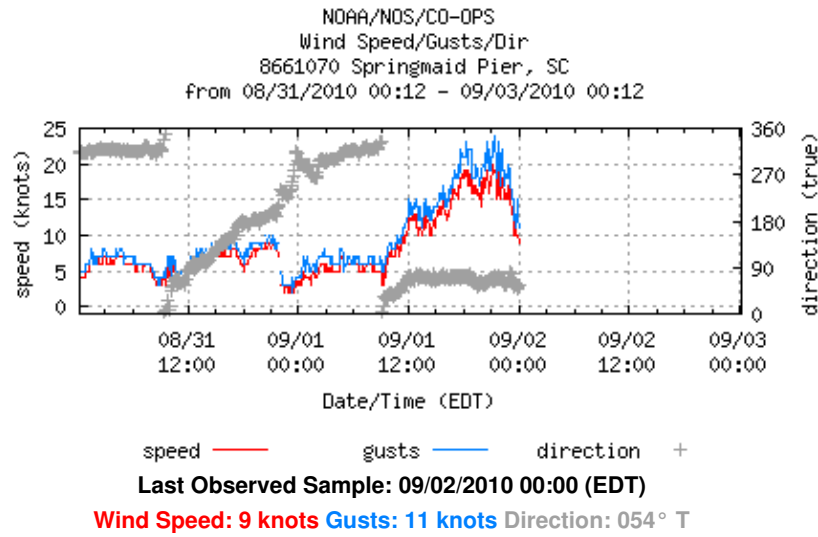
Charleston, SC - [Return to List](#)



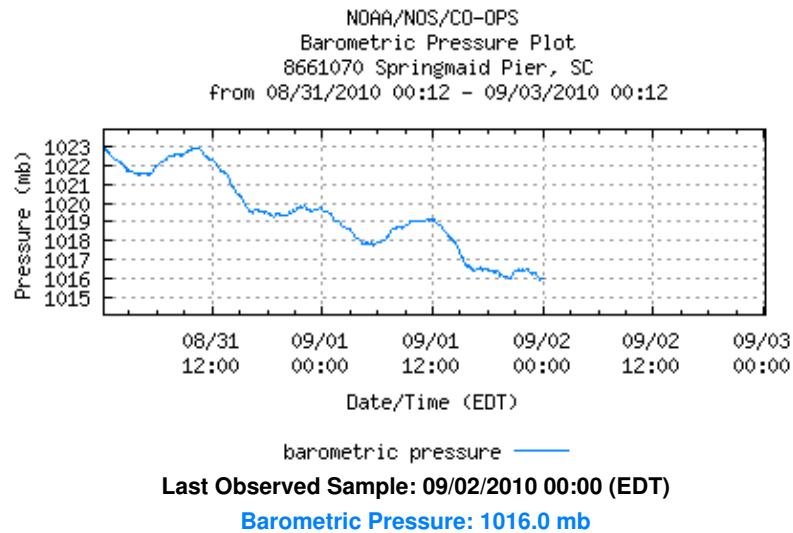
Springmaid Pier, SC - [Return to List](#)



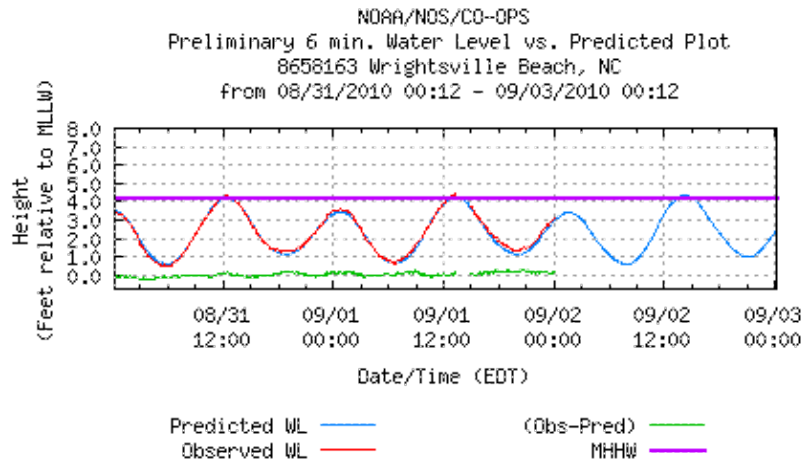
Springmaid Pier, SC - [Return to List](#)



Springmaid Pier, SC - [Return to List](#)



Wrightsville Beach, NC - [Return to List](#)

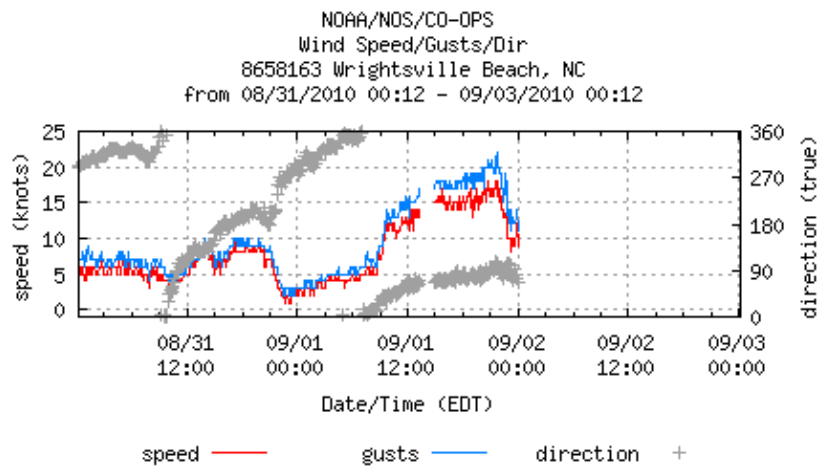


Last Observed Sample: 09/02/2010 00:00 (EDT)

Relative to **MLLW**: **Observed: 3.12 ft. Predicted: 2.97 ft. Residual: 0.15 ft.**

Historical Maximum Water Level: Sep 25 2008, 2.78 ft. above **MHHW**

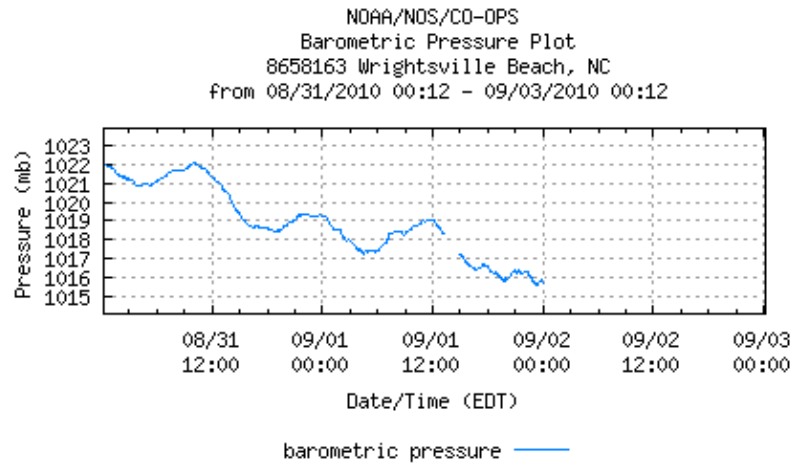
Wrightsville Beach, NC - [Return to List](#)



Last Observed Sample: 09/02/2010 00:00 (EDT)

Wind Speed: 9 knots Gusts: 11 knots Direction: 065° T

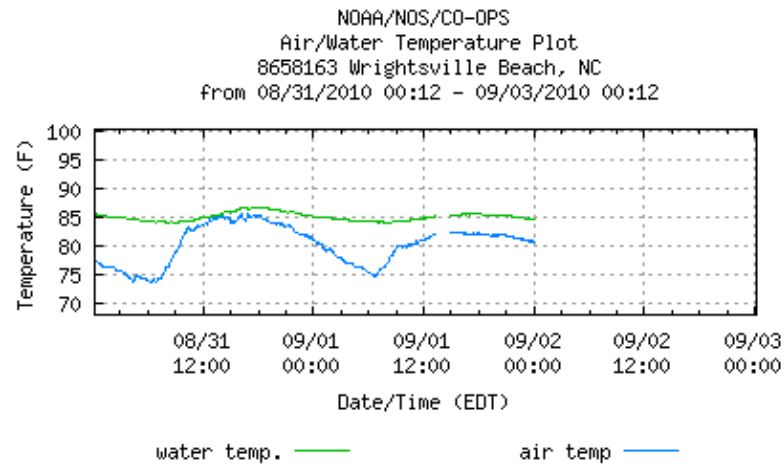
Wrightsville Beach, NC - [Return to List](#)



Last Observed Sample: 09/02/2010 00:00 (EDT)

Barometric Pressure: 1015.7 mb

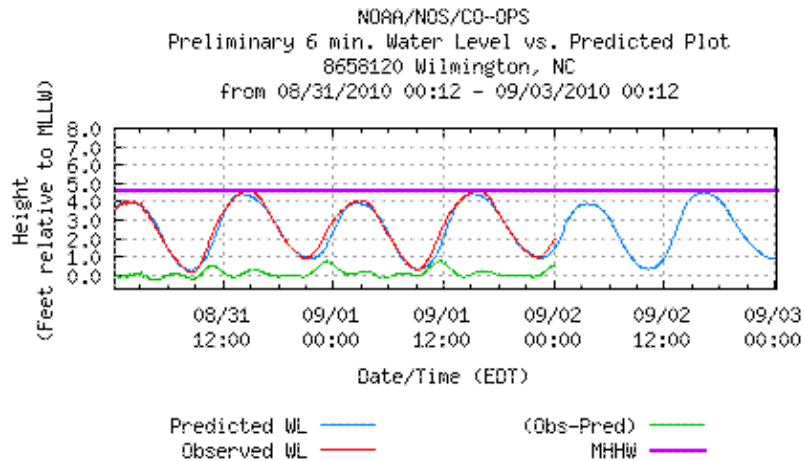
Wrightsville Beach, NC - [Return to List](#)



Last Observed Sample: 09/02/2010 00:00 (EDT)

Water Temperature: 84.9° F Air Temperature: 80.8° F

Wilmington, NC - [Return to List](#)

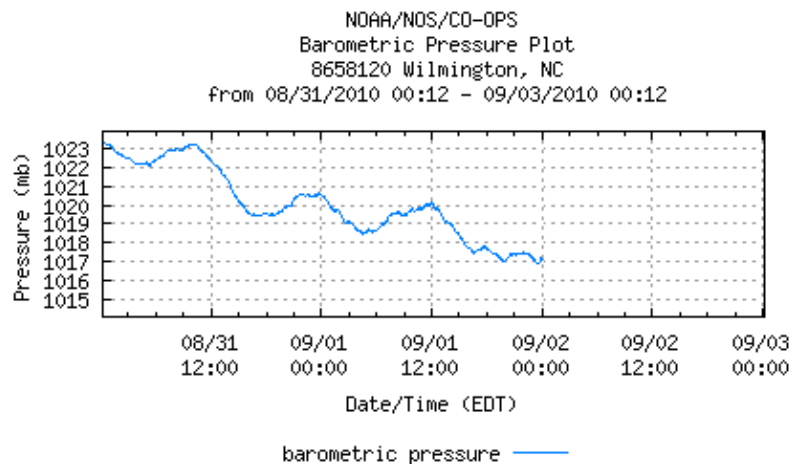


Last Observed Sample: 09/02/2010 00:00 (EDT)

Relative to **MLLW**: **Observed: 1.98 ft. Predicted: 1.43 ft. Residual: 0.55 ft.**

Historical Maximum Water Level: Oct 15 1954, 3.47 ft. above **MHHW**

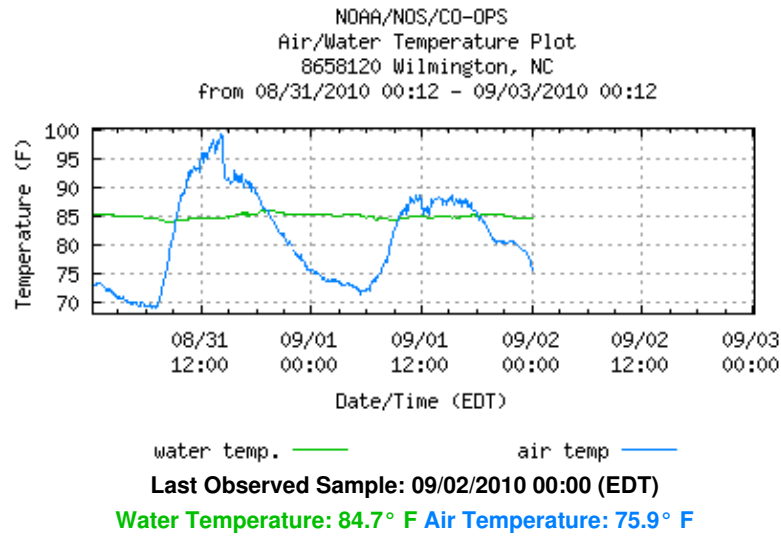
Wilmington, NC - [Return to List](#)



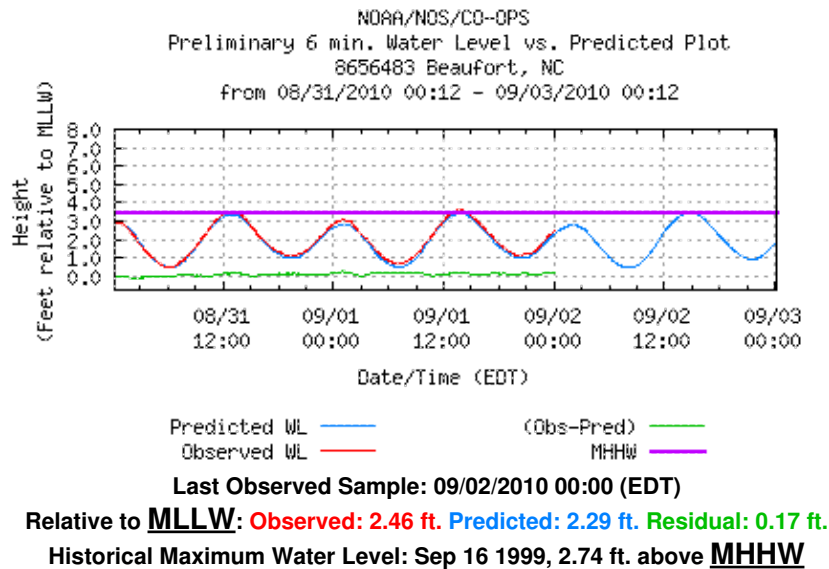
Last Observed Sample: 09/02/2010 00:00 (EDT)

Barometric Pressure: 1017.1 mb

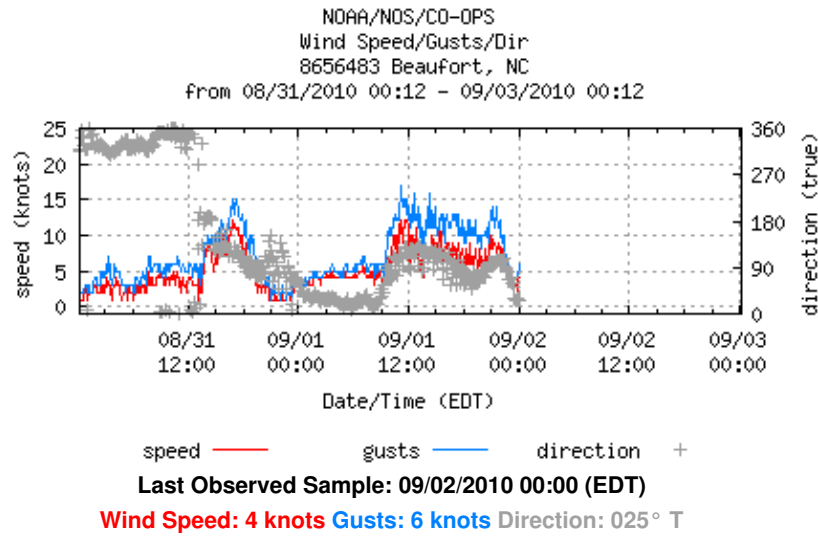
Wilmington, NC - [Return to List](#)



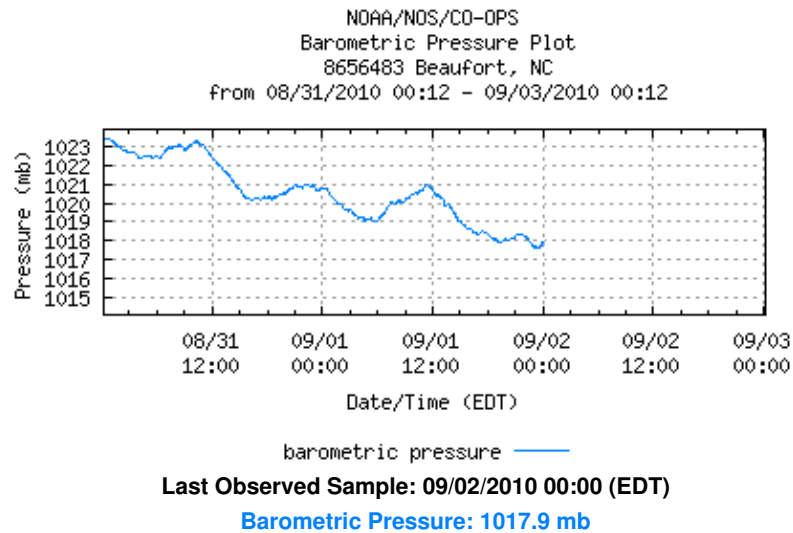
Beaufort, NC - [Return to List](#)



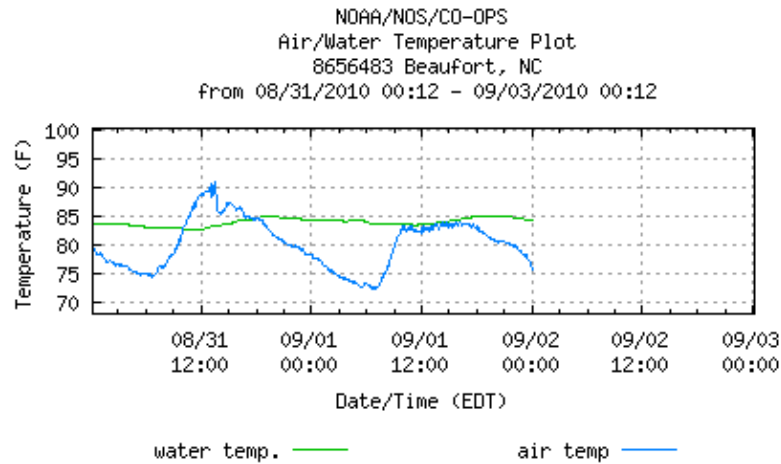
Beaufort, NC - [Return to List](#)



Beaufort, NC - [Return to List](#)



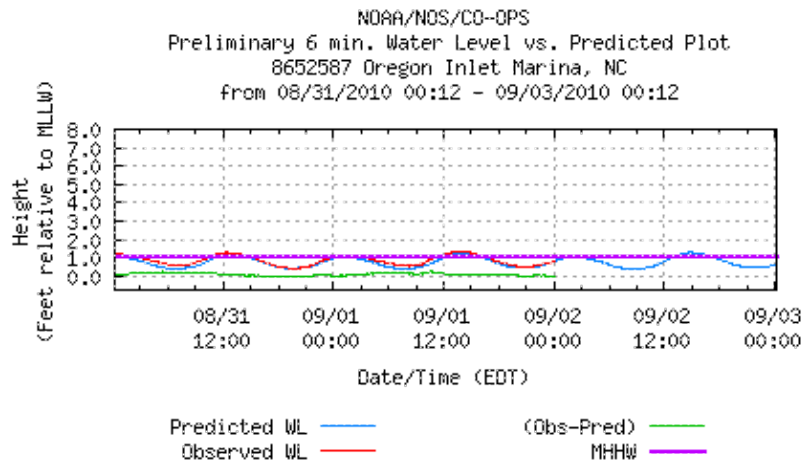
Beaufort, NC - [Return to List](#)



Last Observed Sample: 09/02/2010 00:00 (EDT)

Water Temperature: 84.6° F Air Temperature: 75.9° F

Oregon Inlet Marina, NC - [Return to List](#)

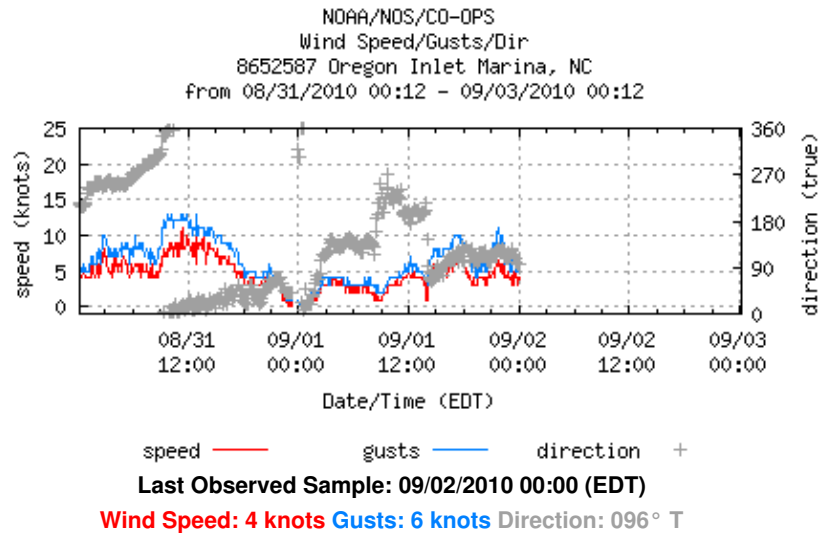


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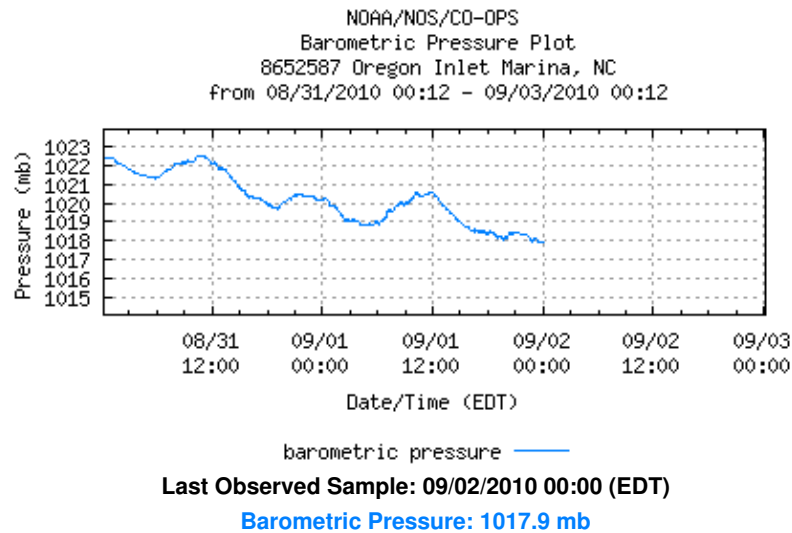
Relative to **MLLW**: Observed: 0.84 ft. Predicted: 0.82 ft. Residual: 0.02 ft.

Historical Maximum Water Level: Sep 16 1999, 4.49 ft. above **MHHW**

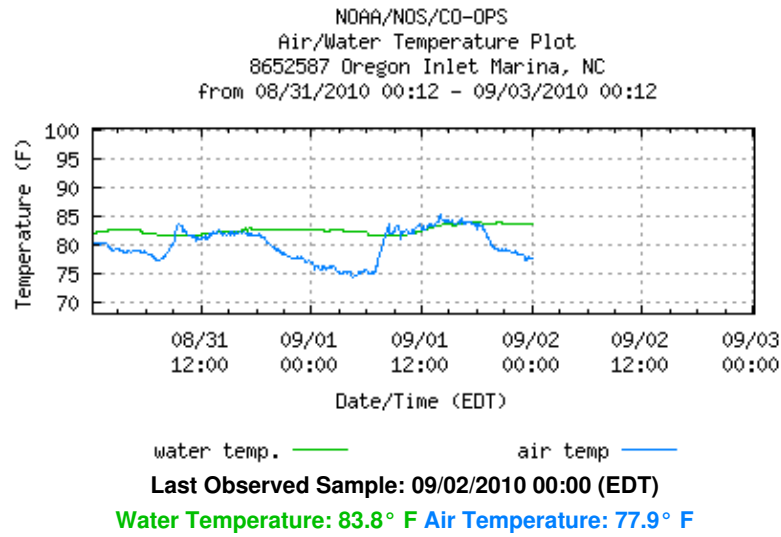
Oregon Inlet Marina, NC - [Return to List](#)



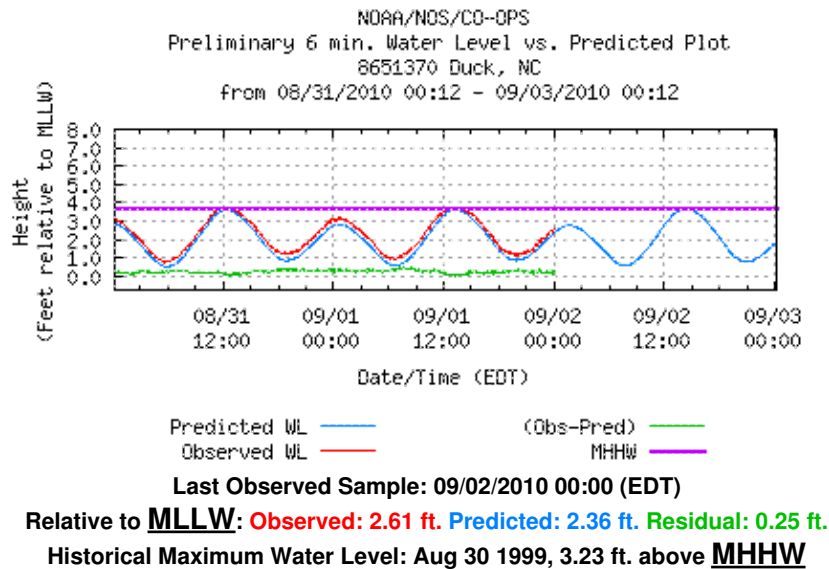
Oregon Inlet Marina, NC - [Return to List](#)



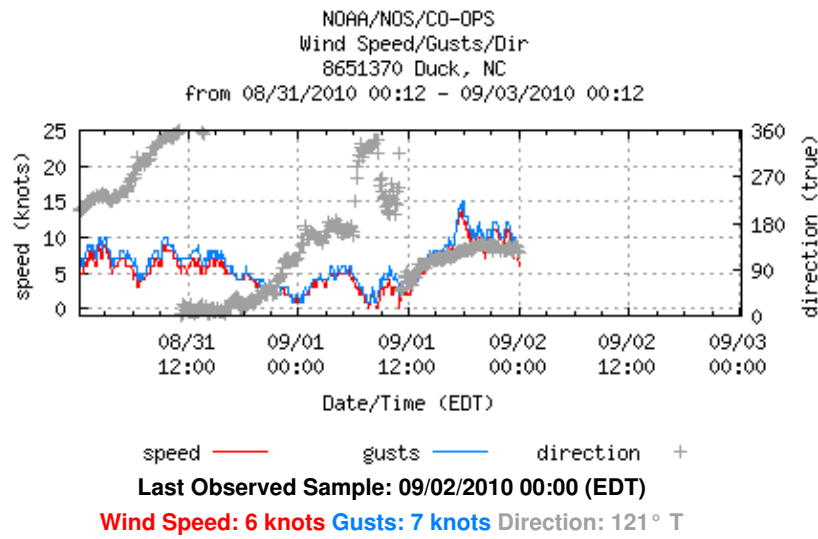
Oregon Inlet Marina, NC - [Return to List](#)



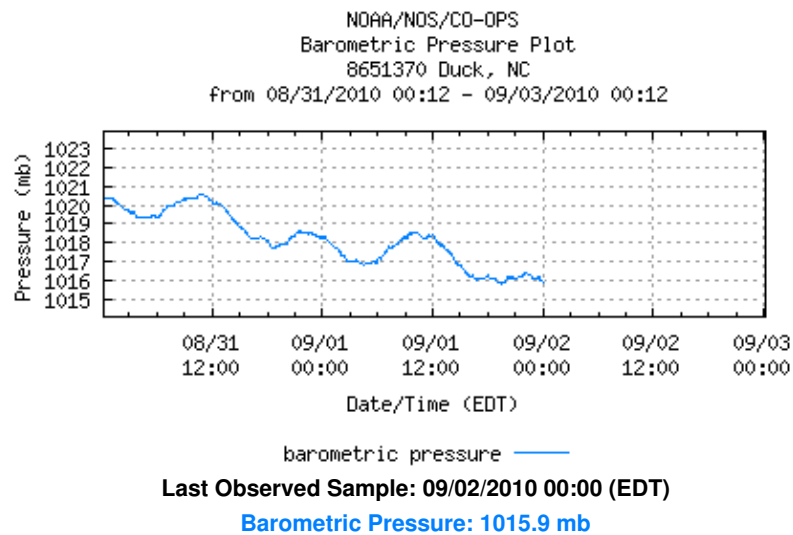
Duck, NC - [Return to List](#)



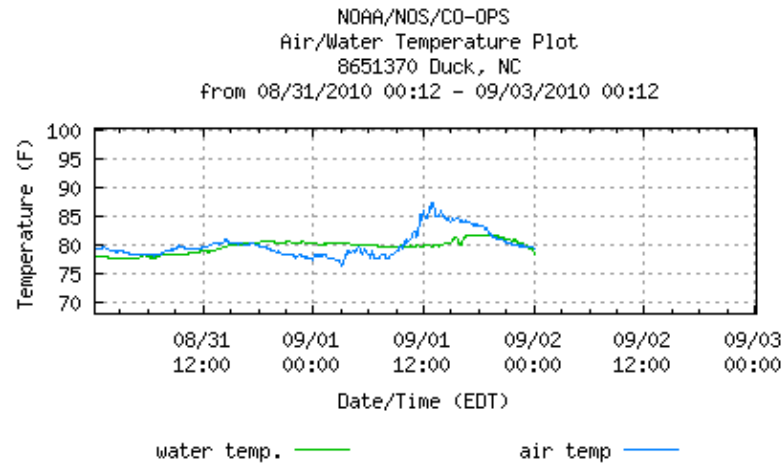
Duck, NC - [Return to List](#)



Duck, NC - [Return to List](#)



Duck, NC - [Return to List](#)



Last Observed Sample: 09/02/2010 00:00 (EDT)

Water Temperature: 78.6° F Air Temperature: 79.5° F

Center for Operational Oceanographic Products & Services (CO-OPS) | National Ocean Service (NOS)
National Oceanic and Atmospheric Administration | U.S. Department of Commerce